PBS exit codes

Category: Running Jobs with PBS

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This article is being reviewed for completeness and technical accuracy.

Do we need to have more details for some of the < 0 exit codes? - rh

The PBS exit value of a job may fall in one of four ranges:

- X = 0 (= JOB_EXEC_OK)

  This is a PBS special return value indicating that the job executed successfully
- X < 0

  This is a PBS special return value indicating that the job could not be executed.
  These negative values are listed below:

  - -1 = JOB_EXEC_FAIL1

    job exec failed, before files, no retry

  - -2 = JOB_EXEC_FAIL2

    job exec failed, after files, no retry

  - -3 = JOB_EXEC_RETRY

    job exec failed, do retry

  - -4 = JOB_EXEC_INITABT

    job aborted on MOM initialization

  - -5 = JOB_EXEC_INITRST

    job aborted on MOM init, checkpoint, no migrate

  - -6 = JOB_EXEC_INITRMG

job aborted on MOM init, checkpoint, ok migrate

- ♦ -7 = JOB_EXEC_BADRESRT

  job restart failed

- ♦ -8 = JOB_EXEC_GLOBUS_INIT_RETRY

  Init. globus job failed. do retry

- ♦ -9 = JOB_EXEC_GLOBUS_INIT_FAIL

  Init. globus job failed. no retry
- 0 <= X < 128 (or 256 depending on the system)

  This is the exit value of the top process in the job, typically the shell. This may be the exit value of the last command executed in the shell or the .logout script if the user has such a script (csh).
- X >=128 (or 256 depending on the system)

  This means the job was killed with a signal. The signal is given by X modulo 128 (or 256). For example an exit value of 137 means the job's top process was killed with signal 9 (137 % 128 = 9).